

Lester Snow, Executive Director
 C/O Rick Breitenbach
 CALFED Bay/Delta Program
 1416 Ninth Street Suite 1155
 Sacramento, CA 95814

September 23, 1999

Dear Executive Director Snow,

Please enter these comments into the formal record for your Draft Programmatic Environmental Impact Report and Statement. The CALFED Bay/Delta program must be revised to: (1) not commit to building any new or expanded dams, reservoirs, or canals during CALFED's "Stage 1" (the first seven years of the program); (2) improve water quality for people and wildlife by preventing pollution at the source; (3) increase serious investments in water conservation and efficiency, groundwater management, pollution prevention, and drinking water treatment; (4) restore our rivers, bays, and fisheries by providing firm guarantees of more fresh water flows and by caring for the land around our rivers; (5) not make taxpayers subsidize new or expanded dams, reservoirs, or canals; and (6) accomplish this ambitious program in an integrated manner with watershed management, not just water management, the central theme.

The program must develop elements to maximize water efficiency and conservation, and base future water needs on realistic assumptions rather than inflated demands. The solutions must not rely on proposed dam raises or new offstream storage reservoirs. To achieve any reasonable level of ecosystem restoration the solutions must remove barrier dams, increase instream flows, and acquire and restore habitat for fish and wildlife. The plan, threatens our free-flowing rivers and wildlife. CALFED proposes to pour more concrete as early as 2007 to build new dams, reservoirs, and the first leg of the Peripheral Canal. The outcomes of Stage I implementations should not have the threat of extraordinarily expensive infrastructure additions if inflated demands are not met. More appropriate would be the threat of mandatory rationing of water by agriculture, industry and urban users if these reductions are not reached voluntarily. We know these reductions can be achieved and we must implement soft path, smart water solutions vigorously. This is and re-operation of hydroelectric facilities are the only real "new water".

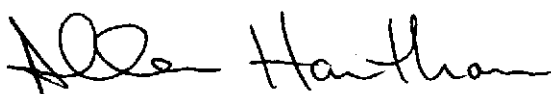
The plan has great potential to improve water quality but falls short by not enforcing pollution limits. Point and non-point source pollution of our ground and surface waters should be dealt with aggressively. The sooner we clean up the problems the sooner all beneficial users will have a safe, reliable supply.

This is the greatest opportunity in decades to restore California's magnificent salmon runs and high-quality drinking water. CALFED's draft plan neglects the most environmentally and economically sound solutions -- conservation, better management of our groundwater and watersheds, and pollution prevention. Agribusiness and big developers are putting heavy

pressure on CALFED and decision-makers to build more dams and a Peripheral Canal and to pay for them with taxpayer dollars. CALFED needs to hear loud and clear that we need and want environmentally and economically sound solutions; conservation, efficiency, and other measures that would provide more water at lower costs for everyone--our environment, farms, industry and families! It could mean the difference between our grandchildren enjoying wild salmon, rivers, and high-quality drinking water, or inheriting a legacy of lifeless canals and reservoirs.

In closing, I would like to say that operating the world's most complex water system without a budget is archaic. We have the programs and the computers capable of handling the complex, multi-variate calculations required to model the system. Water management without a budget is courting water bankruptcy.

Thank you,



Allen Harthorn
Butte Creek

cc: Governor Gray Davis
State Capitol
Sacramento, CA 95814

General Comments on the Delta Levee System Integrity Program component of CALFED programmatic EIS/R.

Delta Levee Base Level Protection Plan

Standards for levee construction and reconstruction should be PL84-99 or better (192-82). Bulletin 192-82 levee standards offer 300 year flood protection vs. 100 year and have recommended water-side slopes up to 7:1 which would allow more opportunities for marsh and riverine aquatic habitat restoration. Innovative design for reconstructed levees should be considered and habitat restoration should be a recommended elements of all levee construction to link with Ecosystem Restoration Program Plan(ERPP).

Delta Levee Special Improvement Projects

Prioritizing levee improvements based on the public benefit accrued would be a significant step in the right direction. Protecting water quality, conservation and enhancement of wildlife and fish habitat and protection of existing public infrastructure is very important. The technical teams prioritizing the special funding should be linked programmatically to the ERPP and the other ecosystem restoration technical teams. Ensuring consistency and balance throughout the watershed, from the Delta to the headwaters is critical to CALFED success.

Delta Island Subsidence Control Plan

Reducing subsidence is certainly a problem from the oxidation of organic matter in the peat soils. The reestablishment of marsh vegetation that originally produced the peat soils through periodic flooding would reintroduce organic matter. Some production agriculture would be sacrificed to protect the greater Delta industry. The current rates of subsidence of greater than 1.5 inches per year on approximately 58,600 acres is unsustainable and Best management Practices must be developed. These areas of subsidence, where levee stability could be a problem, should be redesigned to incorporate wetlands, marsh lands and riparian habitat. Root problems related to decay of decadent and dead roots could be alleviated with root barriers (sheet piles would work in most cases) in the reconstructed levee to allow maximum root growth on either side of the barrier without compromising the integrity of the levee. This would also further develop the link with the ERPP.

Delta Levee Emergency Management Plan

Emergency response to protect the integrity of the Delta is critical. A system of relief valves or overflow weirs outside the Delta could help to attenuate peak flows through the Delta and should be considered as part of the Delta Levee System Integrity Program. Watershed Restorations, particularly floodplain restoration, meadow restoration and runoff retention from urban areas should all be considered as part of an emergency plan for the delta. A wholistic approach is necessary.

Delta Levee Seismic Risk Assessment

Continued assessment and risk analysis are necessary and crucial to the restoration of the Delta.

Conclusion

Concerns of affecting channel capacity and saltwater intrusion potentials should be considered, but not all consuming. Reducing the demand for the unnatural flow of fresh water to the pumps is the safest and most economical program to protect and restore the Delta. Conservation Works! Comments on the *Watershed Management Strategy* component of CALFED programmatic EIS/R.

CALFED Vision for Watershed Management

The vision is missing an important stressor which reduces beneficial uses of the Bay-Delta estuary system. The diversion of water out of the system, primarily at the "pumps", is a stressor of unimaginable proportion. Watershed management suggest that we manage the use of water as well. Trying to fix a watershed system that is in shambles from water diversion is like giving a person counseling while they hemorrhage.

Geographic Scope

Watersheds are wholistic systems. On most rivers and streams the connection between the upper and lower watersheds for anadromous fish has been broken by dams. Sediment transport has also been disturbed but not all together interrupted as fines continue to pour through the reservoirs into the lower watersheds and on into the Bay-Delta, while silt, sand, gravel and

cobble fill the reservoirs. Some rivers still run relatively free. However we cannot ignore the activities above the reservoirs in the common programs. There is no clearly defined dividing line between upper and lower watersheds, only between activities. Diversions, excess runoff and erosion, and water quality problems are common throughout and enhancement should rightly begin at the source and follow a continuum to the ocean. All common programs actions related to watershed management, such as floodplain restoration or erosion control should be part of the watershed program, not the disjointed approach that is implied in the ecosystem restoration and water quality plans.

Goals of Watershed Projects

The only missing element, again, is reducing per capita demand for water. Promoting water supply reliability for current and projected demands for "beneficial uses" is a tough sell when conservation is deemed too expensive. Vegetation management, meadow and riparian restoration take decades to have a significant effect. Conservation must be funded and implemented immediately at all levels.

Need for a Coordinated Watershed Management Strategy

The need for better coordination of watershed activities is an understatement. It is optimistic to suggest the "Management efforts throughout the watersheds will achieve maximum efficiency and effectiveness if they are carried out as part of a coordinated effort." Many elements of watershed management are probably best left to themselves to solve their problems with a little prodding from the appropriate agency or group. However, wherever possible, coordination will help, particularly when it comes to funding. Better coordination of the funding, as has happened in recent CALFED solicitations, is a huge step in the right direction. A coordinated strategy is necessary. However, local participation is crucial and funding should be made available immediately for watershed coordinators and staff for all watersheds of a certain size. Smaller sub-watersheds should have coordinators and access to staff and office within their next level higher watershed. For instance, a coordinator for Dry Creek in Roseville could share staff and office resources with the American River. This commitment is critical to the success of the Watershed Program Plan. Local support is key and coordinators can facilitate that support and develop localized strategies. The process of implementation, however, waits for no one. Good projects could be delayed waiting for the strategy or because people are too busy working on the strategy. Careful development of a watershed approach specific to each watershed can take years. Locally supported and beneficial projects should be funded with or without a strategy. Long-term coordination is essential. Individuals in governmental bureaucracies change frequently and providing continuity is difficult. Thus a long-term commitment to watershed coordination through community-based groups should be sought with cooperative support from non-governmental organizations, whose missions and funding can provide a perpetual commitment.

Implementation

Many of the elements discussed in the draft of the Watershed Program Plan are already underway. CALFED needs to rethink the approach to be adaptive to various stages of

development of watershed groups and the social, cultural and economic makeup of each watershed. What is really needed is coming along on a fast track from two CALFED partners, EPA and USDA. **Watershed assessments** involving the local citizenry help people gain ownership of their watershed. Knowledge is power. **Research** is most often needed to assess unknown elements in watersheds, such as the contribution of sediment from unpaved roads. This gets people involved. **Implementations** should be an ongoing and regular activity. Community tree planting events, bank stabilization, fencing, signs, and trail maintenance all serve to enhance the spiritual connection to our watersheds. And for the long-term, **monitoring** needs to be developed to fully connect people to the health of their watershed and ultimately the health of the entire Sacramento-San Joaquin watershed.

Criteria

Adherence to the "Principles of Watershed Management" from the Sierra Nevada Alliance and Regional Council of Rural Counties is essential. Regular review of the principles by CALFED, environmental groups, agencies and resource management organizations will keep the overall goal in mind.

Watershed Oversight

The cry comes from across the country that top down management will not work. The current draft offers four government lead oversight entities for watershed management. The government should support whomever is most suited to achieve the long-term goals of CALFED. In the case of watershed management, a non-governmental organization or coalition of organizations would have the greatest chance for success. Non-governmental organizations have a much greater level of continuity than governmental agencies and have a long-term dedication to their missions. The Watershed Program Plan should help formalize the funding mechanisms and formalize the commitment of state and federal agencies to provide the assistance necessary for local, community-based organizational success.

Conclusions

Greater emphasis must be placed on empowering local efforts, councils and coalitions. In some cases one group may be the most appropriate for coordination of all activities. In more complex watersheds, councils of groups could provide oversight and individual groups could do what they do best, such as recreational management, or groundwater management. Finally, the implementations mentioned above must be a part of the community and the government must have patience with groups as they grapple with watershed management. Community-based efforts will not solve the problems overnight but they will provide the best chance for a sustainable future. To keep the effort alive, watershed groups and councils need a support program for **organizational capacity building, facilitation and conflict resolution**. With a serious support program for assessments, research, implementation and monitoring, coordinated with organizational support, watershed management including serious water conservation will do the most for the restoration of the Bay-Delta ecosystem.

Comments on the Butte Basin Ecological Zone Vision for Ecosystem Restoration

Dams and diversions on Butte Creek block passage, entrain juvenile salmon and steelhead and reduce streamflow to levels where elevated temperatures violate Clean Water Act goals. Pool levels at most of the dams create a killing field for juvenile salmonids where predatory fish and elevating water temperatures threaten survival. Pool elevations should be maintained as low as possible to avoid this ponding. Adjudication of water rights throughout The Butte Creek system should be undertaken to ensure adequate quantity and quality of for all beneficial uses, especially those which help to recover threatened and endangered species that limit flexibility in other parts of the system. Centerville and Butte Head Dam, despite Department of Fish and Game recommendations to install ladders, continue to seriously degrade the fishery. Although the debate about opening up passage on upper Butte Creek has centered most vocally on removing natural barriers, if the unnatural barriers are removed or laddered, then salmon and steelhead can make the determination if the natural barriers are impassable. Fix the dams or shut them down. In addition to passage, the minimum flow through the greatest part of the Butte Creek holding and spawning areas below Centerville Head Dam is only 40 % of the natural flow of Butte Creek. Sixty per cent of Butte Creek water plus the imported West Branch water passes by this 8 miles of critical habitat so that PG&E can generate pennies worth of electricity at the Centerville powerhouse. This water would greatly increase the holding and spawning habitat in this section. There is very little access and few landowners which gives the salmonids tremendous protection from the urban and recreational stressors in the lower Canyon. Butte Creek needs much more than a 40 cfs minimum in the low-flow section. Water from West Branch Feather River diversions is in part critical to achieving a bountiful recovery on Butte Creek. However it is at the expense of the West Branch. A more wholistic plan could be developed, much like it has on Battle Creek and now moving forward on the Yuba River, to manage the water and the creeks to maximize fishery benefits while maintaining other beneficial uses, irrigation, domestic use and hydroelectric production. An example would be to dedicate some of the water to domestic use by Paradise and add an extra five cubic feet per second to Little Butte Creek below Magalia reservoir to restore steelhead habitat on one of Butte Creeks genetic sink streams. This stream in addition to Dry Creek only support remnants of their former runs due directly to diversions. These sink populations are critical to the biodiversity of the species and can not be ignored just because Butte Creek has a big return of "springers". The entire suite of fishery restoration must be included. Diversions on Cherokee Canal and in Dry Creek must be addressed and steelhead must be recovered.

Dry Creek is also affected by groundwater management in the Cherokee strip and Butte Basin. Transferring groundwater off the overlying land should never occur, even as drainwater. This should be recycled or recharged. Transferring surface water out of the basin and using groundwater should require voter approval. The surface water supplies are Public Trust Resources and decisions affecting their transfer out of the areas of origin should be put to the voters, not left in the hands of the water sellers.

The ERP does not go far enough in describing the need to protect, restore, and enhance the riparian corridor of Butte Creek. Very little emphasis has been given to the corridor considering

it is the primary corridor to the foothills and mountains between the Feather and Sacramento Rivers, it need immediate attention. The corridor was broad and locally connected to vast oak woodlands. This connection is fragmented to the point where more and more of the species that depend on the corridor including salmonids, are listed as threatened or endangered. Recovering the corridor habitat will provide ecosystem restoration for a broad suite of species. There is no mention of setback levees, stream meander or floodplain management for Butte Creek. Deer Creek and Antelope Creek, which together comprise less than 40% of the salmonids counted on Butte Creek, have clear visions for floodplain restoration the ERP. Butte Creek has tremendous potential with the removal of many of the agricultural diversions and a vision to restore natural floodplain interactions for lower Butte Creek is necessary.

With respect to hatchery impacts to Butte Creek from Feather River and Coleman hatcheries, genetics of Butte Creek fish and others must be clearly identified. Butte Creek was planted officially several times in the 1980's. There is much speculation that Butte Creek salmon are nothing more than hybrids of Feather River fish. In addition, the current Department of Fish and Game belief is that Feather River spring run no longer exist. Does this mean that the hatchery practices have destroyed them? In spite of this belief, fish that display all the characteristics of spring run, early arrival, early maturity and summer holding, still come into the Feather River in substantial numbers. This confusion must be addressed. If there are remnants of native fish in Butte Creek or the Feather River, we must be able to identify them and try to enhance those populations.

Finally, the water quality of Butte Creek and its many natural and unnatural tributaries must be addressed. Temperature and sediment pollution are ignored for the most part and are the second most significant stressors to salmonids. Temperature and the diversions have already been mentioned. Sediment is an insidious destroyer of streams. We only have to look to the North Coast to see the effects of years of mismanagement and the unpleasant TMDL lawsuits that have evolved out of the lack of enforcement of Clean Water Act laws. We are not immune to this type of situation. The greatest tragedy would be to fix all the other stressors on Butte Creek only to see the accumulated sediment, both instream and offstream, come down to fill the last remaining holding pools for salmon and steelhead. CALFED must be extremely pro-active in the upper watersheds to see that the soils stays put. As well, fine sediment pollution from agricultural operations threatens fish and aquatic organisms. This is not mentioned in the visions for Butte Creek. Fall flood-up has been hailed as a tremendous success in reducing burning and subsequent air pollution. Unfortunately, after the fields are disced and flooded for waterfowl, they become a turbid pond of clay particles. This water is all discharged back into the streams and absolutely turns blue water to grayish-white. Here again, restoration of a naturally functioning riparian corridor with associated wetlands would allow the capture and holding of this fine sediment pollution to reduce the seriously negative impacts to the creek. Better monitoring must be included in any suite of actions for Butte Creek and all parties must be involved in the effort.

Comments on Waters Use Efficiency

With a masters degree in irrigation, I am aware of the potential of agricultural efficiencies. It seems there is not enough incentive to inspire the vast majority of farmers to grasp this solution. Where are the incentives? An easily achievable 10% reduction in agricultural use would yield more than enough water to satisfy other needed beneficial uses. Urban and industrial water conservation would provide added "new water" to the system and must be vigorously addressed. Here again, the most workable incentives must be developed to encourage participation. The environment should not be held hostage because water users big and small want to waste water. We need to follow the example of desert countries such as Israel, to achieve a balanced water budget. The free-spending days are over. We must live within our **budget**.

Comments on Water Quality Plan

Many of the activities of the Water Quality Plan can be best achieved through pro-active watershed management. Yet, the WQ Plan suggest that it will develop erosion control projects to reduce sedimentation. There is no mention of the fact that this is one of the central activities of watershed management and as common programs, there should be a nexus. In addition, reducing demands in all parts of the system including the service areas of the Colorado River, Owens Valley and the coastal areas of California will reduce the demand and improve the timing of diversions from the delta. This allows for greater operational flexibility and less conflict Lower demand equals better quality. The WQ plan needs to **integrate, integrate and integrate**.

General Comments

This year, we have a chance to help choose a wiser course for California's most important natural resource — water. At stake is the largest estuary in the West, and all the streams that feed into it. Where San Francisco Bay blends with the state's two largest rivers, the Sacramento and the San Joaquin, we find a spectacular and diverse ecosystem, an intricate web of waterways that at one time represented a safe haven for plants and wildlife.

This is the Bay-Delta. It is the focus of this state and federal restoration effort known as CALFED. At the same time, the plan also leans toward building some new water storage facilities to meet the perceived water needs of the state's growing population. Unfortunately, those future water demands are based on flawed assumptions created by the state's Department of Water Resources. Furthermore, CALFED has yet to include the potential savings from more aggressive water conservation programs.

Just how CALFED intends to restore an ecosystem degraded by dams by building yet more dams still hasn't been spelled out in the massive, multi-volume report. But in response to the strong concerns expressed by conservationists about building new dams and harming the Bay-Delta's aquatic ecosystem even further, the effort promises not to "pursue storage at new on-stream reservoir sites." It instead focuses on raising and enlarging existing dams and reservoirs, and building new, so-called 'offstream' storage reservoirs.

CALFED identifies a number of possible projects to increase surface water storage supplies,

including the raising of Shasta and Friant dams on the Sacramento and San Joaquin rivers. In addition, it is studying the potential for offstream storage reservoirs, primarily along the west side of the Central Valley. Offstream storage might be considered environmentally superior to standard dams because it doesn't mean inundating a live river. However, CALFED has largely failed to consider the damages to existing wildlife habitat or the impacts of any massive new water diversions aimed at shaving off flood peaks, needed to fill these supposedly benign offstream facilities. Where are the costs identified to pump at a rate to fill the reservoirs simply from peak events? Where are the repercussions identified when there are no peak events for several years and these reservoirs sit empty and lifeless?

In addition to new water storage facilities, CALFED is pursuing a multi-million dollar fish and wildlife habitat restoration program in the Central Valley. The program includes purchasing water and habitat for fish and wildlife, removing some dams that have acted as barriers to fish migration, improving existing structures or installing new ones such as fish screens to reduce ecosystem impacts, restoring degraded riparian and wetland habitat, and conducting further studies to better determine ecosystem restoration needs.

Conservationists have repeatedly rejected the premise that ecosystem restoration must go hand-in-hand with building new dams. Much still can be done to increase the efficient use and conservation of our existing water supplies. The environment should not be held hostage by water interests intent on milking more money from the taxpayers to build new dams and canals that only will result in further damage to public resources.

Thank you for the opportunity to comment. It is my greatest hope that CALFED can achieve the stated objectives of the program but it must be done in the most cost-effective, socially equitable and environmentally friendly manner. Much of the effort must come from empowering the communities to pro-actively address water conservation and watershed management. The days of backroom brokering of California's resources are over.